

WHAT IS CLAIMED IS:

1. A 2-part adhesive formulation comprising, in a first part, water, a surfactant, and a protected alkylborane complex and, in a second part, an acrylic monomer and a trialkylborane-displacing initiator.
2. The formulation of Claim 1 wherein protected alkylborane complex is a trialkylborane-organonitrogen complex the second part further includes an acrylic polymer as a thixotropic agent.
3. The formulation of Claim 2 wherein the thixotropic agent is a poly(methyl methacrylate).
4. The formulation of Claim 3 wherein the surfactant is a polyvinyl pyrrolidone, a polyetheramine, a polyethylene glycol, a polyethylene glycol-polypropylene glycol copolymer, a polyacrylamide, a hydroxycellulose, a polyvinyl alcohol, a polyacrylic acid salt, or a polymethacrylic acid salt, or a combination thereof.
5. The formulation of Claim 3 wherein the second part of the formulation includes an acrylic monomer selected from the group consisting of hydroxyethyl acrylate, hydroxybutyl methacrylate, and methyl methacrylate; and a trialkylborane initiator selected from the group consisting of acrylic acid and methacrylic acid.
6. The formulation of Claim 5 wherein the acrylic monomer includes methyl methacrylate and the trialkylborane initiator includes acrylic acid.
7. A 2-part adhesive formulation comprising, in a first part, water, a surfactant, and a trialkylborane-organonitrogen complex and, in a second part, methyl methacrylate, a thixotropic agent, and a trialkylborane-displacing initiator selected from the group consisting of acrylic acid, methacrylic acid, and a 2-hydroxyalkyl acrylate.
8. The 2-part adhesive of Claim 7, which includes in either the first or second part or both a pigment, a dye, a filler, or an antioxidant, or a combination thereof.

9. A composition comprising water, a surfactant, an acrylic monomer, a trialkylborane-displacing initiator, and a thixotropic agent.
10. The composition of Claim 9 which further includes a protected alkylborane complex.
11. The composition of Claim 10 wherein the protected alkylborane complex is a trialkylborane-organonitrogen complex.
12. The composition of Claim 10 which forms a cured adhesive.
13. A method comprising the step of contacting a surfactant-stabilized aqueous dispersion of a trialkylborane-organonitrogen complex with a acrylic monomer and a trialkylborane-displacing initiator to form a curing acrylic-based adhesive; and 2) applying the curing adhesive to a low surface energy substrate.
14. The method of Claim 13 wherein steps 1) and 2) are carried out concomitantly.
15. The method of Claim 13 wherein the the low surface energy substrate is selected from the group consisting of polyethylenes, polypropylenes, ethylene- α -olefin copolymers, hydrogenated polyisoprenes, polyvinylidene fluorides, polytetrafluoroethylenes, polyesters, polyamides, polyacetals, and polystyrenes.
16. The method of Claim 13 wherein the low surface energy substrate is an isotactic polypropylene.